ABSTRACT

Optics used in a high vacuum environment are mounted by bonding by use of addition polymerizing material which used in that environment. The suitability for use in the high vacuum environment is achieved by precise control of outgassing of trapped and dissolved gases, including low molecular weight hydrocarbons and amines, and unreacted material from component parts of said addition polymerizing material. A plurality of application quantities of the polymer are prepared in a large batch for use as pre-mixed frozen (PMF) material. The use of the large batch enables more precise control of mixture so that near-stoichiometric proportions of the polymer components are easily achieved.